

Title (en)

Glycol-based cooling mixtures free from nitrite and phosphate.

Title (de)

Nitrit- und phosphatfreie Kühlstoffmischungen auf Glykolbasis.

Title (fr)

Mélanges de refroidissement à base de glycol et exempts de nitrites et de phosphate.

Publication

**EP 0361252 A1 19900404 (DE)**

Application

**EP 89117199 A 19890918**

Priority

DE 3832592 A 19880924

Abstract (en)

Glycol-based coolant mixtures which are free from nitrites and phosphates and contain alkali metal salts of C4- to C16-alkenylsuccinic acids and stabilised silicate and further corrosion-inhibiting additives.

Abstract (de)

Kühlstoffmischungen auf Glykolbasis, die frei von Nitriten und Phosphaten sind, mit einem Gehalt an Alkalisalzen von C4- bis C16-Alkenylbernsteinsäuren und stabilisiertem Silikat sowie weiteren korrosionsinhibierenden Zusätzen.

IPC 1-7

**C09K 5/00**

IPC 8 full level

**C09K 5/00** (2006.01); **C09K 5/08** (2006.01); **C09K 5/20** (2006.01)

CPC (source: EP US)

**C09K 5/20** (2013.01 - EP US); **C23F 11/08** (2013.01 - EP US)

Citation (search report)

- [X] US 4455248 A 19840619 - WOOD DONALD L [US]
- [XP] EP 0283806 A1 19880928 - BASF AG [DE]
- [AD] DE 2943963 A1 19810514 - BASF AG [DE]
- [A] DE 1154976 B 19630926 - BASF AG
- [A] DE 3440194 A1 19860507 - BASF AG [DE]
- [A] DE 1745923 A1 19700305 - UNION CARBIDE CORP

Cited by

US6207072B1; WO9714761A1

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AT BE CH DE ES FR GB IT LI NL SE

DOCDB simple family (publication)

**EP 0361252 A1 19900404**; **EP 0361252 B1 19921119**; AT E82582 T1 19921215; CA 1338729 C 19961126; DE 3832592 A1 19900329; DE 58902767 D1 19921224; JP H02120388 A 19900508; US 5064552 A 19911112

DOCDB simple family (application)

**EP 89117199 A 19890918**; AT 89117199 T 19890918; CA 610349 A 19890905; DE 3832592 A 19880924; DE 58902767 T 19890918; JP 24539389 A 19890922; US 66026791 A 19910226